

*AMENDMENTS TO THE ABSTRACT*

Replace the Abstract with:

A plasma generation apparatus includes a cylindrical power electrode, a dielectric layer ~~cover~~covering the circumference of the power electrode, an auxiliary plasma (AP) earth electrode, a gas flow portion for providing a reaction gas, and a power controller controlling RF power supplied to the power electrode, ~~and. An~~ auxiliary plasma is maintained between the power electrode and the AP earth electrode while the apparatus operates. The apparatus can generate a plasma at low temperature under atmospheric pressure and provide a stable main plasma using the auxiliary plasma. Particularly, even if high-frequency power ~~whose power supply~~that is not stable is used, the auxiliary plasma functions as a stable plasma source, thereby generating a glow plasma uniformly ~~applied to~~over a wide area.